

**Pending Claims**

This listing of claims is a courtesy copy of the pending claims. No amendments have been made in this Reply.

**Listing of Claims:**

1. (previously presented) A method for establishing headroom to provide margin in determining available transmit power value for a mobile station operating in a wireless communication system comprising the steps of:

determining, by the mobile station, a communication channel variance condition, wherein the communication channel variance condition is at least one of a primary pilot power variance, fading period and fade depth estimate, or a peak-to-average estimate within an adaptive measurement interval; and

establishing, by the mobile station, a headroom value based on the communication channel variance condition.

2. (canceled)

3. (previously presented) A method according to claim 1 wherein the mobile station determines a maximum data rate based on the headroom value and sends the maximum data rate to a base station.

4. (previously presented) A method according to claim 1 wherein the mobile station determines a maximum data rate based on the headroom value and sends a rate adjustment request to a base station.

5. (previously presented) A method according to claim 1 further comprising the steps of:  
detecting a battery condition of the mobile station; and  
modifying the headroom value based on the battery condition.

6. (original) A method according to claim 5 wherein the step of modifying the headroom value based on the battery condition comprises:

determining if the battery condition relates to a low battery level; and  
if the battery condition relates to a low battery level, increasing the headroom value.

7. (previously presented) A method according to claim 1 wherein the step of determining a communication channel variance condition includes measuring a variance in a primary pilot power.

8-11. (canceled)

12. (previously presented) A mobile station comprising:

means for determining, by the mobile station, a communication channel variance condition, wherein the communication channel variance condition is at least one of a primary pilot power variance, fading period and fade depth estimate, or a peak-to-average estimate within an adaptive measurement interval; and

means for establishing, by the mobile station, a headroom value based on the communication channel variance condition.

13. (original) A mobile station according to claim 12 further comprising:

means for determining a maximum data rate based on the headroom value; and  
means for sending the maximum data rate to a base station.

14. (original) A mobile station according to claim 12 further comprising:

means for determining a maximum data rate based on the headroom value; and  
means for sending a rate adjustment request to a base station.

15. (original) A mobile station according to claim 12 further comprising:

means for detecting a battery condition of the mobile station; and  
means for modifying the headroom value based on the battery condition.

16. (previously presented) A wireless communication system comprising:
  - a base station;
  - at least one mobile station;
  - means for determining, by the at least one mobile station, a communication channel variance condition, wherein the communication channel variance condition is at least one of a primary pilot power variance, fading period and fade depth estimate, or a peak-to-average estimate within an adaptive measurement interval; and
  - means for establishing, by the at least one mobile station, a headroom value based on the communication channel variance condition.
17. (original) A wireless communication system according to claim 16 further comprising:
  - means for determining a data rate based on the headroom value.
18. (original) A wireless communication system according to claim 17 further comprising:
  - means for sending the data rate between the base station and said at least one mobile station.
19. (original) A wireless communication system according to claim 16 further comprising:
  - means for determining a battery condition of said at least one mobile station; and
  - means for modifying the headroom value based on the battery condition.
20. (original) A wireless communication system according to claim 19 further comprising:
  - means for determining a data rate based on the headroom value; and
  - means for sending the data rate between said at least one mobile station and the base station.